

Remarks

Applicant respectfully requests reconsideration of the outstanding rejections in view of the above amendments and the following remarks.

Amendment to Specification is to include the claim of benefit to provisional applications under 35 U.S.C. §119 (e) in the first sentence of the Specification.

Amendments to previously amended claim 1 find their basis at p. 4, ll. 23 – 25, p. 5, l. 21 to p. 6, l. 8, and p. 6, ll. 15 -21.

Obviousness Double Patenting Rejection

At present, Claims 1 – 7 and 10 stand provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 29 – 49 and 51 of copending Application 9-691284.

Applicant is filing herewith a terminal disclaimer under 37 C.F.R. § 1.321(b) to obviate a provisional double patenting rejection over copending application 9-691284.

In view of the above, Applicant requests withdrawal of the obviousness-type double patenting rejection.

Art Rejection – Obviousness over Sullivan '855 in view of Sullivan '760

At present, Claims 1, 2 and 4 – 6 are rejected under 35 U.S.C. §103(a) as being unpatentable over Sullivan '855 in view of Sullivan '760. Reconsideration of this rejection is requested in view of the following remarks.

The object of Sullivan '855 is to produce a scuff- and cut-resistant, soft cover for a golf ball. For this purpose, Sullivan '855 teaches the use of

- (1) ionomers based on ethylene/acrylate/acid terpolymers,
- (2) about 10 – 100% neutralization,
- (3) the possibility to add a number of additional materials to the ionomer cover material – pigments, UV absorbers, antioxidants,

antistatic agents, stabilizers, plasticizers, metal stearates, processing aids, reinforcing materials, and non-ionomeric polymers, and

- (4) limitations on additional materials and amount based on whether they impair desired properties.

Sullivan '855 does not teach, suggest, or provide any motivation to do any of the following

- (1) selecting any particular material from the large group of "additional materials" as an additive to the ionomers,
- (2) selecting metal stearates from the numerous possible softening agents, that include "plasticizers, metal stearates, processing aids, etc." as a softening agent for the ionomers,
- (3) using a specific amount of organic acid, particularly 20 – 45 weight percent, and
- (4) highly neutralizing the acid in both the ionomer and the organic acid, particularly to greater than 90% or to 100% or to greater than 100%
- (5) concurrently or subsequently neutralizing the melt blend of acid copolymer (or melt-processible ionomer) and fatty acid (or fatty acid salt) to greater than 90%.

Sullivan '770, used to fill the voids of Sullivan '855, has the objective of making a cheaper golf ball cover having similar or improved COR with similar or reduced hardness. For this purpose, Sullivan '770 teaches the use of

- (1) a C₂ to C₈ olefin, C₃ to C₈ α,β ethylenically unsaturated monocarboxylic acid copolymer ionomer that can have an additional comonomer such as an acrylic ester,
- (2) about 15 – 75% neutralized,
- (3) 10 – 100 parts fatty acid salts by weight per 100 parts ionomer (about 9 to 50 wt%).

Sullivan '770 does not teach, suggest or provide any motivation to do any of the following:

- (1) highly neutralizing the acid of both the acid copolymer and the organic acid, particularly to greater than 90% or to 100% or to greater than 100%,
- (2) using 20 – 45 weight percent organic acid, and
- (3) concurrently or subsequently neutralizing the melt blend of acid copolymer (or melt-processible ionomer) and fatty acid (or fatty acid salt) to greater than 90%.

For the claims to be obvious over the references taken as a whole, there must be some motivation to combine them in a manner that results in the limitations of the claimed invention. It is not permitted to simply cherry pick from the various aspects of the two patents as was done here. There must be a motivation, and that is lacking. Even if there were a basis for combining the references, the result would be different than that of the present claims. For example,

- (1) Sullivan '855 allows for 10 – 100% neutralization, while Sullivan '770 provides for 15 – 75% neutralization. No motivation to neutralize to greater than 90% has been provided. Combining the references would suggest at best 15 – 75%, the range that is embraced by both references, not greater than 90%.
- (2) Sullivan '855 provides no teaching whatsoever about wt.% organic acid other than a suggestion that organic acid salts be “low” so as to not impair properties. Sullivan '770 provides for 10 – 100 pph salt of organic acid. But, Applicant sees no motivation to pick 20 – 45 wt.% from Sullivan '770, when Sullivan '855 suggests that adding too much would impair properties. Combining the references would suggest a percentage much closer to the 10 pph (about 9 %) of the 10 – 100 pph range, not 20 – 45 wt.%.
- (3) Taking points (1) and (2) together, Sullivan '855 provides no disclosure (other than possibly “low”) for % organic acid with a 10 – 100% neutralized ionomer. Sullivan '770 provides for 10 – 100 pph organic acid salt with a 15 – 75% neutralized ionomer.

Taken together, there is no motivation to select a percent neutralization greater than 90% together with a percent organic acid between 20 and 45%. Doing so would be outside the teaching of Sullivan '770 and likely outside the teaching of Sullivan '855. While the declaration provided in an earlier response may not categorically prove that adding a high amount of a softener at all acid concentrations would destroy the purpose of Sullivan '855, it makes it clear that softening does result in reduced scuff resistance. Indeed the entire tenor of Sullivan '855 is that softeners must be at low level to avoid property loss. Sullivan '770 makes it clear that 10 pph (about 9%) is "high." Taking the two references together would lead one skilled in the art to shy away from "high" percentages (greater than 9%) if scuff resistance were the goal, and would lead one away from neutralization greater than 75% if high levels of organic acid salts was the goal. It is well known that as the degree of neutralization ionomers alone gets higher, the ionomer becomes less and less thermoformable. Knowing this, one skilled in the art would conclude that adding salts to ionomers neutralized to over 90% would not work (see Sullivan '770, for example, where the high salt levels are added to an ionomer that is only neutralized to 15 –75%).

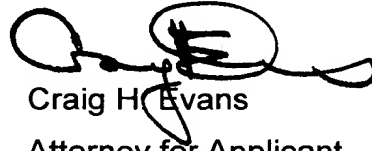
- (4) Neither Sullivan '855 nor Sullivan '770 teaches use of organic acid (or salt) in a melt blend with an acid copolymer (or melt-processible ionomer) that is concurrently or subsequently neutralized to greater than 90%.

Since all the limitations of the claims taken as a whole are not taught or suggested in the references taken together as a whole, the 35 U.S.C. §103(a) rejection of the claims cannot stand as a matter of law and should be withdrawn.

Conclusion

In view of the above remarks and the enclosed amendments, it is felt that all claims are now in condition for allowance and such action is requested. Should the Examiner believe that an interview or other action in Applicants' behalf would expedite prosecution of the application, the Examiner is urged to contact Applicant's attorney by telephone at (302) 992-3219.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Craig H. Evans", with a stylized flourish extending to the right.

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